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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,561	05/14/2007	James Cove	34111 US NATL	8580
29560 7590 02/17/2010 PEARSON & PEARSON, LLP 10 GEORGE STREET LOWELL, MA 01852				
EXAMINER				
FRIEDHOFFER, MICHAEL A				
ART UNIT		PAPER NUMBER		
2833				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/590,561

**Applicant(s)**

COVE, JAMES

**Examiner**

Michael A. Friedhofer

**Art Unit**

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 14, 17-20, 22-25, 29, 31, 32, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14, 17-20, 22-25, 29, 31, 32, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/8/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features 8-11, 19, and 36 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 6, 7, 14, 22, 24, 25, 29, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al (6987233) in view Hoehne et al (7060922).

Cole et al discloses in the figures a push button assembly comprising a housing 36 with an open end thereto bounded by a flange structure 26, the housing being insertable through an aperture in a panel 22 with the flange on an outer side thereof; a fixing means 38,30 for fixing the housing relative to the panel beneath the panel; a push button 24 movably mounted within the open end and flange structure; a lamp 70 mountable relative to the housing for operation by movement of the button via actuating structure 52 disposed between the button and the switch within the housing, characterized in the lamp and the switch are mounted within the housing so that at least a part of the lamp and the switch is located within the confines of the housing and wherein the switch comprises a rectangular body with an upwardly projecting actuator 84 and connection terminals 86. The housing provides abutments for supporting the actuating structure. At least one of the sidewall structures is generally open to provide access to the interior of the housing. The flange structure has outwardly inclined side walls which taper towards the top free end of the housing. The housing provides electrostatic protection to any circuitry within the housing and wherein

the protection comprises grounding members integrated into the housing to discharge any introduced electrical charges. The actuator includes a centrally disposed aperture and elongated legs 54 with outwardly turned feet 56 projecting from the center of opposed bottom wall edges. The body overlies the inner side wall structures within the confines of the housing and the terminals projecting out of the housing. The switch is a microswitch. The lamp is disposed in the center of the housing mounted on a rectangular strip with connector terminals. The lamp strip and the switch body are separate components. The body and the light snap onto a part of the housing and is held in place by pegs passing through the body of the switch.

Cole et al does not disclose that a major part of the switch and lamp within the housing.

Hoehne et al teaches a push button assembly including a housing structure with a flange in which a majority of the switch 30 and the lamp are disposed. The spring 38 is fixed across the frame to provide relative movement of the button within the flange structure.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Hoehne et al to Cole et al to form the housing such that the housing encloses a major portion of both the switch and the lamp with a portion for access and include a spring for biasing the actuator within the housing because this is for the purpose of protecting the switch and lamp from exposure to contaminants and dirt both as assembled and prior to installation into the panel.

As for the lamp being a led or multiple leds, this is a matter of engineering design choice based on the parts available to the manufacturer, as well as, the cost of manufacturing.

4. Claims 2, 4, 17-20, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al (6987233) in view of Hoehne et al (7060922) as applied to claims 1, 3, 6, 7, 14, 22, 24, 25, 29, 31, and 32 above, and further in view of Ichimaru (7702092).

Cole et al as modified by Hoehne et al teach all of the claimed limitations with the exception of the housing having a generally square frame structure, clips on the housing for mounting in the panel, and that the flange is opaque.

Ichimaru teaches a push button assembly including a housing with a substantially square frame with clips for mounting in the panel and the flange of the illuminated switch is opaque.

It would have been obvious to one of ordinary skill in the art to utilize the teachings of Ichimaru to Cole et al as modified by Hoehne et al to form the frame in a square shape with clips for mounting in the panel because this is for the purpose of ensuring a fixed mounting while preventing rotation of the housing within the panel while making the flange opaque while the button is illuminated will not alter the visibility of the switch within the panel.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al in view of Hoehne et al and Ichimaru as applied to claims 1-4, 6, 7, 14, 17-20, 29, 31, 32, and 35 above, and further in view of Wurz et al (6102394).

Cole et al as modified by Hoehne et al and Ichimura teaches all of the claimed limitations with the exception of the frame structure is shorter in axial length than the horizontal length of each of the side wall structures.

Wurz et al teaches a pushbutton structure in which the frame structure is shorter in axial length than the horizontal length of each of the side wall structures.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Wurz et al to Cole et al as modified by Hoehne et al and Ichimura to form the housing with these dimensions because this is for reducing the depth necessary to mount the switch within the panel.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sakakino et al, Shinohara et al, Miyake, Cole et al ('176), Orrico et al, Chen et al, Riera et al, and Verdu et al teach illuminated push button structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Friedhofer whose telephone number is 571-272-1992. The examiner can normally be reached on Mon-Fri 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee Luebke can be reached on 571-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael A. Friedhofer  
Primary Examiner  
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